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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for *in vitro* transcription of mRNA and/or translation of polypeptides, the method comprising:

synthesizing said mRNA and/or polypeptides in a transcription and/or translation reaction mix substantially free of polyethylene glycol, comprising:

an extract from bacterial *E. coli* cells comprising membrane vesicles containing respiratory chain components; components of polypeptide and/or mRNA synthesis machinery; a template for transcription of said mRNA and/or translation of said polypeptide; monomers for synthesis of said mRNA and/or polypeptides; and co-factors, enzymes and other reagents necessary for said transcription and/or translation;

magnesium at a concentration of from about 5 mM to about 20 mM;

wherein oxidative phosphorylation, which is sensitive to electron transport chain inhibitors, is activated in said reaction mix.

2-3. (canceled)

- 4. (previously presented) The method of Claim 1, wherein transcription of mRNA and/or translation of polypeptides is at least two fold higher than synthesis in the absence of said oxidative phosphorylation.
- 5. (previously presented) The method according to Claim 1, wherein transcription of mRNA and/or translation of polypeptides is at least three fold higher than synthesis in the absence of said oxidative phosphorylation.
- 6. (previously presented) The method of Claim 1 wherein said transcription of mRNA and/or translation of polypeptides is performed as a batch reaction.

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7. (previously presented) The method of Claim 1, wherein said transcription of mRNA and/or translation of polypeptides is performed as a continuous reaction.

8-12. (canceled)

13. (currently amended) A method for *in vitro* transcription of mRNA and/or translation of polypeptides, the method comprising:

synthesizing said mRNA and/or polypeptides in a transcription and/or translation reaction mix substantially free of polyethylene glycol, comprising:

an extract from bacterial <u>E. coli</u> cells grown in glucose and phosphate containing medium comprising components of polypeptide and/or mRNA synthesis machinery; a template for transcription of said mRNA and/or translation of said polypeptide; monomers for synthesis of said mRNA and/or polypeptides; and co-factors, enzymes and other reagents necessary for said transcription and/or translation;

magnesium at a concentration of from about 5 mM to about 20 mM; at least one of spermine or spermidine at a concentration of at least about 1 mM; wherein oxidative phosphorylation, which is sensitive to electron transport chain inhibitors, is activated in said reaction mix.

14- 22. (canceled)

- 23. (previously presented) The method of Claim 13 wherein said synthesis is performed as a batch reaction.
- 24. (previously presented) The method of Claim 13, wherein said synthesis of polypeptides is performed as a continuous reaction.

25-29. (canceled)

30. (new) The method of Claim 13, wherein transcription of mRNA and/or translation of polypeptides is at least two fold higher than synthesis in the absence of said oxidative phosphorylation.

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31. (new) The method according to Claim 13, wherein transcription of mRNA and/or translation of polypeptides is at least three fold higher than synthesis in the absence of said oxidative phosphorylation.